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[12]实用新型专利说明书

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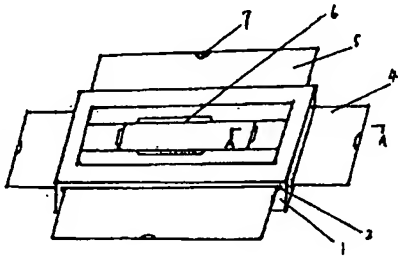
[54]实用新型名称 一种幻灯机遮光器

[57]摘要

一种幻灯机遮光器，由回字形盒体和四块遮光板组成，它特点是盒体的四个边 框上均设有能插进遮光板的通孔和能使相邻遮光板滑行的凹槽，各通孔内设有 遮光板，在外力作用下，该遮光板能在孔通和相邻边框的凹槽作往返运动。该 遮光器能克服以往遮光片通光孔位置及其大小固定不变的缺陷，可以根据需要 改变通光孔的位置和大小，并能有效的遮住幻灯片周边的漏光，方便操作，提 高放映质量。



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权 利 要 求 书

1、一种幻灯机遮光器，由回字形盒体和4块遮光板组成，其特征在于：在遮光器盒体的四个边框上，相对的两边框相应的位置设有一个能插进遮光板的通孔，一个能让另一个遮光板滑动的凹槽；在四个边框的通孔内各设有一块遮光板，该遮光板的侧面嵌在相邻边框的凹槽内。

2、根据权利要求1所述的幻灯机遮光器，其特征在于：所述遮光板在盒体内的一端设有止动条，在盒体外的一端设有止动装置。

说 明 书

一种幻灯机遮光器

本实用新型是用于幻灯机遮光的一种遮光器。

现行的幻要机，都配有一个遮光设备，以便只让光源发射出的光线，通过遮光设备的通孔照射到幻灯片后投影到银幕上。然而现有幻灯机所配的遮光设备太简单，功能太单一，一般只是一个回字形的固定薄片，光线能孔的位置和大小均是固定不变的，只适合于特定的幻灯机型和特定的幻灯片，对幻灯片剩余周边部分的遮光效果不好，也没有对幻灯片进行部分遮光的功能，因此这种遮光片的适用范围小，使用效率不高，给幻灯机操作者灵活运用幻灯机，提高放映效果带来诸多不便。

本实用新型的目的在于：为克服现有幻灯机遮光片的上述缺陷，提供一种结构简单，操作灵活，遮光效果好，适用范围宽的幻灯机遮光器，满足操纵者灵活运用幻灯机的需求，提高放映效果。

本实用新型的目的是这样实现的：设计一个回字形的遮光器盒体，以代替现有的回字形遮光片，在遮光器盒体的四个边框上，相对的两边框相应位置设有一个能插进遮光板的通孔，一个能让另一遮光板在内滑动的凹槽，盒体四个边体上的通孔内各设有一个遮光板，该庶光板的侧面嵌在相邻边框的凹槽内，在外力作用下可作往返运动；每块遮光板在盒体内的通光孔一端，通过销钉或粘结固定有止动条，止动条的高度略大于边体上遮光通孔的高度，以防操作时因用力过猛而遮光板拉出体外；每块遮光板在盒体外部的一端中部，设有止动装置，以防在不用时遮光板受振动滑出盒体而损坏，止动装置可以上卡销，或是搭扣等。

本实用新型的优点是：①由于遮光器盒体的四边均设有可进退的遮光板，根据需要可随时调节通光孔的位置和大小，因此能适用于多种型号的幻灯机和不同尺寸的幻灯片，能对幻灯片进行周边遮光及部分遮光；提高幻灯机的放映效果；②该遮光器结构简单，制作容易，成本低，便于推广应用。

下面结合附图介绍一个实施例：

图1是本实用新型的结构示意图。

图2是图1中的A—A剖视图。

参照附图，在回字形遮光器盒体（1）的四个边框上均设有一个通孔（2），一个凹槽（3），且两对边上的通孔和凹槽其位置及大小均相同，在各通孔（2）内各插有一块遮光板，设两宽边框上的遮光板为（4），两长边框上的遮光板为（5），每块遮光板在盒体内的一端通过销钉固定有止动条（6），每块遮光板在盒体外的一端中部设有止动卡销（7）。使用时只要将遮光器固定在幻灯机上原遮光片的位置，就可根据需要调节通光孔的位置及其大小，给操作者带来诸多方便。

说 明 书 附 图

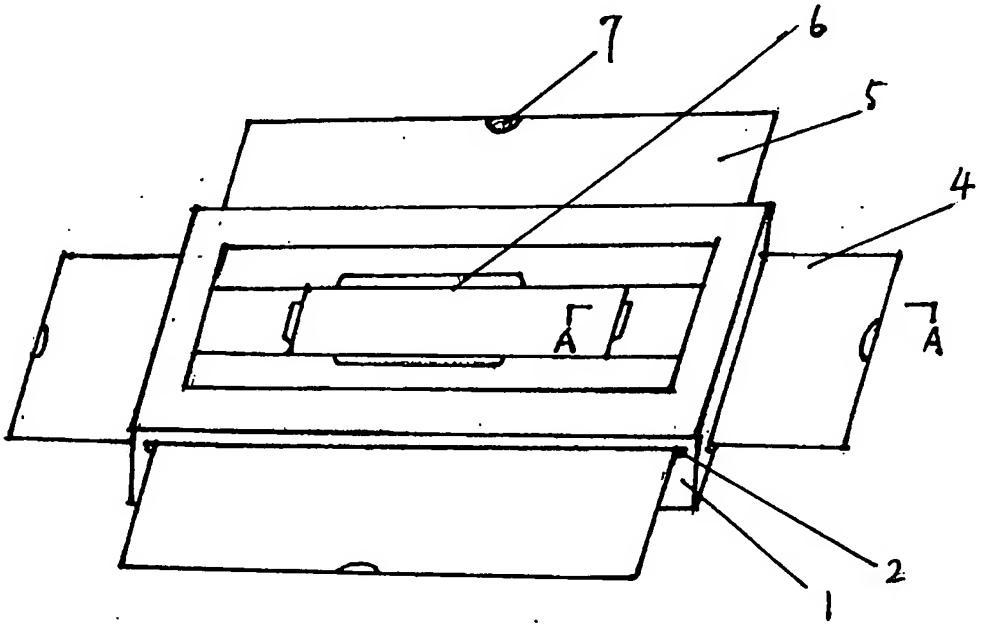

图 1.

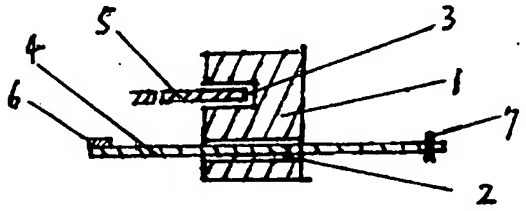

图 2.

Abstract

The present utility model relates to a photochopper comprising a hollow square box and four shading plates. Any one of the four frames of the box has a through hole in which a shading plate can be inserted and a groove in which adjacent shading plate can slide. A shading plate is inserted in each through hole so that the plate can slide backward and forward in the through hole and adjacent grooves by outside force. The photochopper solves existing shading plates' problems such as that the positions and sizes of light-passing-holes are changeless. The present utility model can change the position and size of light-passing-hole if necessary. And the present utility model can shading effectively the leak of light from peripheral areas of slides so as to facilitate operations and improve projection efforts.

Claims

1. A photochopper for slide projector comprising a hollow square box and four shading plates, wherein in the four frames of said box, a through hole in which a shading plate can be inserted and a groove in which other shading plate can slide are opened in each frame so that the positions of the holes and grooves in two opposite frames correspond with each other; a shading plate is inserted in each through hole while its sides are embedded in the grooves of the adjacent frames.

2. A photochopper for slide projector according to claim 1, wherein said shading plate has stopping bar which is mounted at its end inside said box and stopping device which is mounted at its end outside said box.

Description

PHOTOCHOPPER FOR SLIDE PROJECTOR

TECHNICAL FIELD

The present utility model relates to a photochopper for a slide projector.

BACKGROUND ART

A slide projector usually comprises a photochopper in order that only a light beam emitted from a light source passing through a hole of the photochopper can emit on the slide and then project onto a screen. But the photochopper of the existing slide project is too simple and unifunctional. Usually, the photochopper is a hollow square (the shape like a Chinese character "回") sheet and the position and size of its light-passing-hole is changeless. The shaping device is only suitable to particular projector types and particular slides. It has no function for shielding a slide partially and the shielding effort for residual peripheral part of the slide is not good. Therefore, the shading sheet, which application is restricted and efficiency is low, brings a lot of inconvenience to an operator who wants to use a slide projector smartly and improve projection efforts.

SUMMARY OF THE UTILITY MODEL

The present utility model has been made in light of the above problem, and has as its object the provision of a photochopper for a slide projector which is maneuverable, and has simple structure, good shading effort, and wide applicability so as to let an operator use a slide projector smartly and improve projection efforts.

The present utility model provides a photochopper which has a hollow square box having four frames insteads of an existing hollow shading sheet. In

the four frames of the box, a through hole in which a shading plate can be inserted and a groove in which another shading plate can slide are opened in each frame so as that the positions of the holes and grooves in two opposite frames correspond with each other. A shading plate is inserted in each through hole while its sides are embedded in the grooves of the adjacent frames so that it can slide backward and forward by outside force. Each shading plate has a stopping bar fastened by a pin or by felting at its end near the light-passing-hole inside the box. The heights of the stopping bars are a little bigger than those of the through holes so that the shading plates will not be drawn out of the box because of overexerting while operating. Each shading plate has a stopping device mounted in the middle of its edge outside the box in order that the shading plates will not slide out of the box and break while not using. The stopping devices may be claps or hasps.

The present utility model has as its advantages that: ①.It can be applied in various types of slide projects and various sizes of slides because that a slidable shading plate for adjusting the position and size of the light-passing-hole is disposed on each frame of the photochopper box. And it can do peripheral shading and partial shading for slides so as to improve projection efforts of slide projectors. ②. The photochopper has as its characteristics of simple structure, low cost, and easy to produce and promote.

A preferred embodiment of the present utility model will now be described below referring to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a diagram showing a configuration of the present utility model.

FIG. 2 is a cross sectional view taken through A—A of FIG. 1

EMBODIMENTS OF THE INVENTION

As shown in the figures, the hollow square photochopper box (1) has four frames. A through hole (2) and a groove (3) are opened in each frame and the

positions and sizes of the through holes and grooves in opposite frames are the same. A shading plate is inserted in each hole (2). There are the shading plates(4) in the two frames in width and the shading plates(5) in the two frames in length. On each shading plate, a stopping bar (6) is fastened at the end inside the box by a pin. And on each shading plate, a stopping clap (7) is mounted in the middle of the edge outside the box. An operator can adjust the position and size of the light-passing-hole only by fixing the photochopper at the position of the former shading plate. Therefore the present utility model can bring a lot of convenience to operators.